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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,999	02/26/2004	Alexei Skarine	13210-20	6731

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BERESKIN AND PARR
40 KING STREET WEST
BOX 401
TORONTO, ON M5H 3Y2
CANADA

EXAMINER	
NGUYEN, KEVIN M	
ART UNIT	**PAPER NUMBER**
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/785,999	SKARINE, ALEXEI	
	Examiner	Art Unit	
	Kevin M. Nguyen	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/20/06,2/4/05,3/31/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 8-10, 13-17, 20-22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ward et al (US 6,824,321) hereinafter Ward.

3. As to **claim 1**, Ward teaches a keyboard, said keyboard for use with a device in which a display screen for displaying output to a user is provided, said keyboard comprising *(figures 7 and 8G of Ward teaches a keyboard for using with a mobile phone in which a display screen, col. 11, lines 1-6):*

a) a plurality of keys, wherein each key is transparent *(a plurality of keys 712 in which the keys is transparent); and*

b) a housing for supporting said keys, wherein said housing is adapted to attach to said device such that said keys overlie at least a part of said display screen; so that in use, when said housing is attached to said device, at least one part of one or more images displayed on said at least a part of said display screen is visible to said user through at least one of said plurality of keys (*a housing 704 supports the keys 712, the housing is integrated to the mobile phone 700, the keys 712 disposed over*

electroluminescent displays 708, col. 7, lines 4-19, and col. 8, lines 43-48; the touchpad 612 is transparent for allowing the keypad displayed by the illuminated electroluminescent sheet 602-610 to be viewed by a user, when illuminated, each of the electroluminescent sheets 602-610 display a keypad having a predefined configuration of keys such that display the image of a numeric or alphabet of each key, col. 7, lines 13-23).

As to claims 2 and 3, Ward teaches the keyboard of claim1, wherein said device is a mobile device, and a handheld electronic device in col. 8, lines 32-42.

As to claim 4, Ward teaches of claim 1, wherein said device provides a touch-sensitive element, wherein said touch-sensitive element is actuated to send one or more signals to a processor when said touch-sensitive element is touched, and wherein said housing is adapted to attach to said device such that said keys overlie at least a part of said touch-sensitive element *(force sensors 510, a printed circuit board (PCB), housing 506, keys 522, col. 6, lines 1-6, and lines 45-53).*

As to claim 5, Ward conventionally discloses the keyboard of claim 4, wherein each key comprises at least first and second surfaces and is moveable within said housing, between a first position in which said key does not touch said touch-sensitive element, and a second position in which said second surface of said key is displaced to actuate said touch-sensitive element, such that when a key of said plurality of keys is pressed at said first surface thereof by said user, said key is moved from said first position to said second position to actuate said touch-sensitive element in fig. 1, col. 1, lines 15-27.

As to claim 8, Ward teaches the keyboard of claim 1, wherein each of said plurality of keys is adapted to magnify the at least part of said images visible to said user therethrough *(each key 410 has a shape 412 such as bump, and a dome shape similar to the lens shape, col. 5, lines 5-7, and col. 6, lines 34-37).*

As to claim 9, Ward conventionally discloses the keyboard of claim 8, wherein said first and second surfaces of each of said plurality of keys oppose each other and are convex in shape in fig. 3.

As to claim 10, Ward teaches the keyboard of claim 1, wherein said housing further comprises at least one actuator supporting each of said plurality of keys, wherein each key is biased in said first position by said respective at least one actuator supporting said key, and wherein said respective at least one actuator is compressible to allow said key to move to said second position when said key is pressed *(each key 410 has a shape 412 such as bump, and a dome shape similar to the lens shape, which perform the function of the neutral position after pressing, col. 5, lines 5-7, and col. 6, lines 34-37).*

4. As to **claim 13**, figures 7 and 8G of Ward teach a device comprising a processor and a memory coupled to said processor, at least one processing module controlled by said processor, a display screen coupled to said processor, and a keyboard adapted for use with said device comprising *(a mobile phone 700, PCB/a processing system, and memory, col. 5, lines 23-25, col. 6, lines 1-4, and col. 11, lines 1-6):*

a) a plurality of keys, wherein each key is transparent *(a plurality of keys 712 in which the keys is transparent);* and

b) a housing for supporting said keys, wherein said housing is adapted to attach to said device such that said keys overlie at least a part of said display screen; wherein said at least one processing module is programmed to display one or more images on said first part of said display screen, such that for each key, at least one part of said images is visible to said user therethrough when said housing is attached to said mobile device, and wherein said at least one processing module is programmed to determine the at least one part of said images visible through said key when pressed (*a housing 704 supports the keys 712, the housing is integrated to the mobile phone 700, the keys 712 disposed over electroluminescent displays 708, col. 7, lines 4-19, and col. 8, lines 43-48; a firmware memory is programmed to identify the indicia such as graphics, alphanumeric characters the position and function of the keys 410, col. 5, lines 12-25; the touchpad 612 is transparent for allowing the keypad displayed by the illuminated electroluminescent sheet 602-610 to be viewed by a user, when illuminated, each of the electroluminescent sheets 602-610 display a keypad having a predefined configuration of keys such that display the image of a numeric or alphabet of each key, col. 7, lines 13-23).*

5. Claim 14 shares the same limitations as those of claim 2 and therefore the rationale for rejection will be the same.

6. Claim 15 shares the same limitations as those of claim 3 and therefore the rationale for rejection will be the same.

7. Claim 16 shares the same limitations as those of claim 4 and therefore the rationale for rejection will be the same.

8. Claim 17 shares the same limitations as those of claim 5 and therefore the rationale for rejection will be the same.

9. Claim 20 shares the same limitations as those of claim 8 and therefore the rationale for rejection will be the same.

10. Claim 21 hares the same limitations as those of claim 9 and therefore the rationale for rejection will be the same.

11. As to claim 22, Ward teaches device of claim 13, wherein said at least on processing module is programmed to reconfigure said keyboard, by changing the one ore more images displayed to said user on said first part of display screen *(suitable software program identified to control displaying by dynamically changing maps areas of the keys 600, col. 7, lines 34-48).*

12. Claim 25 shares the same limitations as those of claim 10 and therefore the rationale for rejection will be the same.

13. As to claim 26, Ward teaches the device of claim 13, further comprising a backlight to illuminate said one or more image displayed on said display screen (*the electroluminescent display device is a self back light).*

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 6, 7, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Molne (US 6,243,080).

As to claim 6, Ward teaches all of the claimed limitation of claim 1, except wherein said housing is also adapted to attach to said device such that at least another part of touch-sensitive element remains accessible for providing user input and unobstructed by said keys.

However, Molne teaches a related mobile device comprising keys 16 being arranged separated from a touch-sensitive panel 30, fig. 1, col. 3.

As to claim 7, Molne teaches the keyboard of claim 1, wherein said housing is also adapted to attach to said device such that at least another part of said display screen remains visible to said user and unobstructed by said keys *(keys 16 being arranged separated from a display screen 14, fig. 1, col. 3).*

Claim 18 shares the same limitations as those of claim 6 and therefore the rationale for rejection will be the same.

Claim 19 shares the same limitations as those of claim 7 and therefore the rationale for rejection will be the same.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Molne into Ward to create the claimed invention. It would have been obvious to modify Ward to separate keys 16 from the touch-sensitive panel 30, and the display screen 14 as taught by Molne because this would allow the user to select, and optionally, "drag-and-drop," without removing their finger from the touch-sensitive panel.

16. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Ossia (US 6,747,635).

Ward teaches all of the claimed limitation of claims 1 and 13, except for the keyboard is removable, in that the housing of the keyboard can be detached from the mobile device.

However, Ossia teaches a related portable device which includes keyboard 19 is removable and insertable a housing 11 in fig. 8.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Ossia into Ward to create the claimed invention. It would have been obvious to modify Ward to have keyboard 19 being removable and insertable the housing 11 as taught by Ossia, because this would provide a hybrid packaging design for a portable personal computer which is substantially the same size and weight as a palmtop computer and which combines elements of both desktop and palmtop computers, but with new features of a full-function ergonomic keyboard and mouse to provide additional functionality and flexibility (Ossia, col. 2, lines 56-61).

17. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Taylor et al (US 7,151,528).

Ward teaches all of the claimed limitation of claims 1 and 13, except for the keyboard further comprising means for permitting a proximity sensor of said device to detect whether said housing is detached from said device.

However, Taylor teaches a related mobile phone keypad device which includes a proximity-sensitive touchpad behind keys.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Taylor into Ward to create the claimed invention. It would have been obvious to modify Ward to dispose a proximity sensitive touchpad behind the mobile phone keypad as taught by Taylor, because would improve the touchpad operating through proximity sensing without requiring direct contact with the touchpad in order to activate (Taylor, col. 2, lines 1-10).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen
Patent Examiner
Art Unit 2629

KMN
March 12, 2007